

## **STATEMENT OF BASIS**

Dal-Tile International, Inc.  
Fayette, Alabama  
Fayette County  
404-0007

### **Introduction**

This proposed Title V Major Source Operating Permit renewal is issued under the provisions of ADEM Admin. Code r. 335-3-16. The above-referenced applicant has applied to renew the existing Title V Permit, which was originally issued on October 1, 2001. The above named applicant has requested authorization to perform the work or operate the facility shown on the application and drawings, plans and other documents attached hereto or on file with the Air Division of the Alabama Department of Environmental Management, in accordance with the terms and conditions of this permit.

Dal-Tile's current Title V Major Source Permit will expire on October 29, 2016. Under the provisions of ADEM Admin Code R. 335-3-16-.12, major sources are required to submit applications for permit renewal at least six (6) months, but not more than eighteen (18) months, before the date of expiration. Dal-Tile's renewal application was due on April 29, 2016. The Department received Dal-Tile's renewal application on March 30, 2016.

Dal-Tile operates a ceramic quarry tile facility in the city of Fayette, Alabama. The facility is allowed to operate 8,760 hours per year. Based on the Title V renewal application, this facility is a potential major source for Hydrogen Fluoride (HF).

The following are the significant sources of air pollutants at this facility:

- Tunnel Kilns
- Crushing and Screening Operation
- Storage Dryers
- Chemical Flashing Operation
- Extrusion and Cutting
- Feldspar Storage Silo
- Emergency Engine

40 CFR Part 63 Subpart JJJJ "National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing" applies to structural clay products manufacturing facilities that are considered a major source of HAP. A major source of HAPs is defined as one that has the potential to emit 10 TPY of any one HAP, or 25 TPY of any combination of HAP. Dal-Tile is considered a major source of HAP and is thus subject to this subpart. According to Table 7 of this subpart, Dal-Tile is an existing affected source and must comply with the applicable emission limitations and work practice standards in Tables 1, 2, and 3 of this subpart no later than December 26, 2018.

## Tunnel Kilns

The tunnel kiln operation consists of sources TK1 (Tunnel Kiln #1) and TK2 (Tunnel Kiln #2). Tunnel Kilns #1 and #2 each have a small stack (Emission Points 7 and 8) and share a combined large stack (Emission Point 9). Emissions of PM, SO<sub>2</sub>, NO<sub>x</sub>, CO, VOC, HCl, and HF are generated from these sources. No control device is used to control emissions from these sources.

### Applicability

- These sources are subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, *“Major Source Operating Permits”*.
- These sources have enforceable limits in place in order to prevent them from being subject to the provisions of ADEM Admin. Code 4. 335-3-14-.04, *“Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration]”*.
- These sources are subject to ADEM Admin. Code r. 335-3-4-.04(1), *“Control of Particulate Emissions for Process Industries - General”*.
- These sources are subject to ADEM Admin. Code r. 335-3-4-.01(1), *“Control of Particulate Emissions – Visible Emissions”*.
- These sources are subject to the applicable requirements in 40 CFR Part 63 Subpart JJJJ *“National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing”*.

### Emissions Standards

Particulate Matter (PM) and Opacity:

- Emissions of particulate matter from each kiln shall not exceed the lesser of 2.5 lb/hr or the allowable set by the formula:

$$E = 3.59P^{0.62}$$

(P < 30 tons/hr)

Where E = Emissions in pounds per hour and P = Process weight per hour in tons per hour.

(ADEM Admin. Code r. 335-3-4-.04-(1), ADEM Admin. Code r. 335-3-14-.04 (Anti-PSD))

- These units shall burn natural gas only.

(ADEM Admin. Code r. 335-3-14-.04 (Anti-PSD))

- These units shall not emit particulate matter of an opacity of more than one 6-minute average greater than twenty percent (20%) in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate matter emissions greater than forty percent (40%).

(ADEM Admin. Code r. 335-3-4-.01)

- These units shall be subject to the emissions limits in Table 1 and operating limits in Table 2 to Subpart JJJJ of Part 63 as of December 26, 2018.

(§63.8405, 40 CFR 63 Subpart JJJJ)

### Expected Emissions

Expected emissions for these sources are listed below.

Emission Point	Pollutant	Expected Emissions		Emission Limit
		lb/hr	TPY	lb/hr
7, 8, & 9	PM <sup>1</sup>	3.58	15.68	2.5 <sup>3</sup>
7, 8, & 9	SO <sub>2</sub> <sup>1</sup>	7.03	30.78	
7, 8, & 9	NO <sub>x</sub> <sup>1</sup>	4.59	20.11	
7, 8, & 9	CO <sup>1</sup>	8.52	37.31	
7, 8, & 9	HF <sup>1</sup>	5.21	22.79	
7, 8, & 9	HCl <sup>2</sup>	1.72	7.53	
7, 8, & 9	VOC <sup>2</sup>	0.24	1.064	
7, 8, & 9	Other HAP <sup>2</sup>	0.11	0.47	

<sup>1</sup> Based on March 13, 2000 Stack Test

<sup>2</sup> Based on AP-42 Emission Factors

<sup>3</sup> This limit applies per kiln. Assume each kiln contributes half of PM emissions.

### Periodic Monitoring and Compliance Assurance Monitoring (CAM)

#### Particulate Matter (PM) and Opacity:

- The facility shall perform a visual check once per week of the stacks associated with these units.

(ADEM Admin. Code r. 335-3-16-.05(c))

- If instantaneous visible emissions in excess of 10% opacity are noted from the kilns, maintenance inspections and/or corrective action to reduce the visible emissions are to be initiated within two (2) hours. After the corrective action has been performed, the permittee shall conduct another visual check to ensure that the visible emissions have been reduced.

(ADEM Admin. Code r. 335-3-16-.05(c))

- The facility shall demonstrate continuous compliance with each applicable emission limit and work practice standard according to Table 6 to Subpart JJJJJ of Part 63 as of December 26, 2018.

(§63.8470, 40 CFR 63 Subpart JJJJJ)

- These units do not utilize a control device to meet an emissions standard. Therefore, CAM is not applicable.

#### Recordkeeping and Reporting Requirements

- Stack observations, corrective action, and all maintenance records of each source shall be documented and available for inspection.

(ADEM Admin. Code r. 335-3-16-.05(c))

- The Permittee shall submit a written report of exceedances of the stack opacity and any deviations from work practice standards or, if there were no exceedances or deviations, a statement that there were no exceedances or deviations. The semi-annual reports shall be received within sixty (60) days of the end of each semi-annual reporting period.

(ADEM Admin. Code r. 335-3-16-.05(c))

- The facility shall maintain records documenting the use of natural gas.

(ADEM Admin. Code r. 335-3-14.04 (Anti-PSD))

- The facility shall submit each applicable report in Table 9 to Subpart JJJJJ of Part 63 as of December 26, 2018.

(§63.8485, 40 CFR 63 Subpart JJJJJ)

#### **Crushing and Screening Operation**

The crushing and screening operation consists of sources DP1 (Dry Pan Crushing- Line 1), DP2 (Dry Pan- Crushing Line 2), SC1 (Screening- Line 1), SC2 (Screening- Line 2), and CRH1 (Fired Scrap Crusher). PM emissions are generated from these sources. Emissions from Dry Pan Crushing and Screening Line 1 are controlled by Baghouse DC-1 (Emission Point EP-1). Emissions from Dry Pan Crushing and Screening Line 2 are controlled by Baghouse DC-2, and emissions from the Fired Scrap Crusher are controlled by Baghouse DC-3. Baghouses BH-2 and BH-3 share a common exhaust (Emission Point EP-2).

### Applicability

- These sources are subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, “*Major Source Operating Permits*”.
- This source has enforceable limits in place in order to prevent it from being subject to the provisions of ADEM Admin Code r. 335-3-14-.04, “*Air Permits Authorizing Construction in Clean Air Areas “[Prevention of Significant Deterioration]”*”.
- These sources are subject to ADEM Admin. Code r. 335-3-4-.04(1), “*Control of Particulate Emissions for Process Industries - General*”.
- These sources are subject to ADEM Admin. Code r. 335-3-4-.01(1), “*Control of Particulate Emissions – Visible Emissions*”.
- These units are subject to 40 CFR 64, “*Compliance Assurance Monitoring*”.

### Emission Standards

Particulate Matter (PM) and Opacity:

- Emissions of particulate matter from Baghouse BH-1 exhaust must not exceed the lesser of 3.0 lb/hr or the allowable set by the following:

$$E = 3.59P^{0.62}$$

(P < 30 tons/hr)

Where E = Emissions in pounds per hour and P = Process weight per hour in tons per hour.

(ADEM Admin. Code r. 335-3-4-.04-(1) & ADEM Admin. Code r. 335-3-14-.04 (Anti-PSD))

- Emissions of particulate matter from Baghouse BH-2 and Baghouse BH-3 combined exhaust must not exceed the lesser of 3.0 lb/hr or the allowable set by the following:

$$E = 3.59P^{0.62}$$

(P < 30 tons/hr)

Where E = Emissions in pounds per hour and P = Process weight per hour in tons per hour.

(ADEM Admin. Code r. 335-3-4-.04-(1) & ADEM Admin. Code r. 335-3-14-.04 (Anti-PSD))

- These units shall not emit particulate matter of an opacity of more than one 6-minute average greater than twenty percent (20%) in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate matter emissions greater than forty percent (40%).

(ADEM Admin. Code r. 335-3-4-.01)

#### Expected Emissions

Expected emissions for these units are based on a stack test performed October 16, 1991.

Emission Point	Pollutant	Uncontrolled Emissions		Controlled Emissions		Emission Limit
		lb/hr	TPY	lb/hr	TPY	lb/hr
EP-1	PM	161.50	707.37	1.56	6.85	3.0
EP-2	PM	185.05	810.50	3.51	15.36	3.0

#### Periodic Monitoring and Compliance Assurance Monitoring (CAM)

- These units are subject to PM emissions limits, utilize control devices to meet those limits and have an uncontrolled potential to emit that exceeds 100 TPY. Therefore, these units are subject to CAM. The monitoring requirements are listed in the CAM Appendix.

#### Recordkeeping and Reporting Requirements

- These units are subject to CAM requirements. The applicable recordkeeping and reporting requirements are listed in the CAM Appendix.
- A semi-annual monitoring report shall be submitted to the Air Division within sixty (60) days of the end of the reporting period. This report shall include summary information on the number, duration, and cause (including unknown cause, if applicable) of excursions or exceedances and the corrective actions taken.

#### **Storage Dryers**

The Drying operation consists of 18 dryers. There are three stacks associated with this operation (Emission Points 3-5), each of which receives exhaust from six dryers. Emissions of PM, SO<sub>x</sub>, and VOC are generated from these sources. No control devices are used to control emissions from these sources.

#### Applicability

- These sources are subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, "*Major Source Operating Permits*".

- These sources are subject to ADEM Admin. Code r. 335-3-4-.04(1), “*Control of Particulate Emissions for Process Industries - General*”.
- These sources are subject to ADEM Admin. Code r. 335-3-4-.01(1), “*Control of Particulate Emissions – Visible Emissions*”.

#### Emission Standards

Particulate Matter (PM) and Opacity:

- Emissions of particulate matter from each emission point must not exceed the limit set by the following:

$$E = 3.59P^{0.62}$$

(P < 30 tons/hr)

Where E = Emissions in pounds per hour and P = Process weight per hour in tons per hour.

(ADEM Admin. Code r. 335-3-4-.04)

- These units shall not emit particulate matter of an opacity of more than one 6-minute average greater than twenty percent (20%) in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate matter emissions greater than forty percent (40%).

(ADEM Admin. Code r. 335-3-4-.01)

#### Expected Emissions

Expected emissions from these units are based on AP-42 emissions factors.

Emission Point	Pollutant	Expected Emissions		Emission Limit
		lb/hr	TPY	lb/hr
3, 4, & 5	PM	2.01	8.82	15.88
3, 4, & 5	SO <sub>x</sub>	0.26	1.16	
3, 4, & 5	VOC	0.57	2.51	

#### Periodic Monitoring and Compliance Assurance Monitoring (CAM)

Particulate Matter (PM) and Opacity:

- The facility shall perform a visual check of the stacks associated with these units at least once per week.

(ADEM Admin. Code r. 335-3-16-.05(c))

- The Permittee shall conduct a visual check of the stacks associated with these units at least weekly for visible emissions greater than 10%. If the instantaneous opacity exceeds 10%, maintenance inspections and/or corrective action to reduce the visible emissions are to be initiated within two (2) hours.

(ADEM Admin. Code r. 335-3-16-.05(c))

- These units do not utilize a control device to meet an emissions limit. Therefore, CAM is not applicable.

#### Recordkeeping and Reporting Requirements

- Stack observations, corrective action, and all maintenance records of each source shall be documented and available for inspection.

(ADEM Admin. Code r. 335-3-16-.05(c))

- The Permittee shall submit a written report of exceedances of the stack opacity and any deviations from work practice standards or, if there were no exceedances or deviations, a statement that there were no exceedances or deviations. The semi-annual reports shall be received within sixty (60) days of the end of each semi-annual reporting period.

(ADEM Admin. Code r. 335-3-16-.05(c))

#### **Chemical Flashing Operation**

The Chemical Flashing Operation consists of sources CF1 (Chemical Flashing Station #1) and CF2 (Chemical Flashing Station #2). Emissions of PM, manganese, and cobalt are generated from manganese chloride and cobalt chloride being sprayed onto about twenty percent (20%) of the tile. A Wet Scrubber (Emission Point EP-6) controls emissions from these sources.

#### Applicability

- These sources are subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, *“Major Source Operating Permits”*.
- These sources are subject to ADEM Admin. Code r. 335-3-4-.04(1), *“Control of Particulate Emissions for Process Industries - General”*.
- These sources are subject to ADEM Admin. Code r. 335-3-4-.01(1), *“Control of Particulate Emissions – Visible Emissions”*.



## Emission Standards

Particulate Matter (PM) and Opacity:

- Emissions of particulate matter from each emission point must not exceed the limit set by the following:

$$E = 3.59P^{0.62}$$

(P < 30 tons/hr)

Where E = Emissions in pounds per hour and P = Process weight per hour in tons per hour.

(ADEM Admin. Code r. 335-3-4-.04)

- These units shall not emit particulate matter of an opacity of more than one 6-minute average greater than twenty percent (20%) in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate matter emissions greater than forty percent (40%).

(ADEM Admin. Code r. 335-3-4-.01)

## Expected Emissions

Emission Point	Pollutant	Uncontrolled Emissions		Controlled Emissions <sup>1</sup>		Emission Limit
		lb/hr	TPY	lb/hr	TPY	lb/hr
6	PM	0.930	4.05	0.015	0.101	20.66
6	HAP (Manganese)	0.007	0.030			
6	HAP (Cobalt)	0.002	0.007			

<sup>1</sup> Emissions are based on 97.5% efficiency of the control device.

## Periodic Monitoring and Compliance Assurance Monitoring (CAM)

Particulate Matter (PM) and Opacity:

- The facility shall perform a visual check of the stacks associated with these units at least once per week.

(ADEM Admin. Code r. 335-3-16-.05(c))

- If instantaneous visible emissions in excess of 10% opacity are noted from the wet scrubber, maintenance inspections and/or corrective action to reduce the visible emissions are to be initiated within two (2) hours. After the corrective action has been performed, the permittee shall conduct another visual check to ensure that the visible emissions have been reduced.

(ADEM Admin. Code r. 335-3-16-.05(c))

- A properly maintained and operated device shall be utilized to measure the pressure differential between the inlet and exhaust of the scrubber to determine if the pressure differential is within the manufacturer's recommended operating range. The pressure differential shall be checked on at least a weekly basis. Whenever a pressure differential is outside the manufacturer's recommended range, maintenance inspections and/or corrective action to bring the pressure differential within the manufacturer's recommended range are to be initiated within two (2) hours.

(ADEM Admin. Code r. 335-3-16-.05(c))

- The wet scrubber shall be inspected and cleaned at least annually.

(ADEM Admin. Code r. 335-3-16-.05(c))

- Uncontrolled potential emissions from these sources do not exceed 100 TPY. Therefore, CAM is not applicable.

#### Recordkeeping and Reporting Requirements

- Stack observations, corrective action, and all maintenance records of each source shall be documented and available for inspection.

(ADEM Admin. Code r. 335-3-16-.05(c))

- The Permittee shall submit a written report of exceedances of the stack opacity or pressure differential and any deviations from work practice standards or, if there were no exceedances or deviations, a statement that there were no exceedances or deviations. The semi-annual reports shall be received within sixty (60) days of the end of each semi-annual reporting period.

(ADEM Admin. Code r. 335-3-16-.05(c))

#### **Extrusion and Cutting**

The extrusion and cutting operation consists of sources F-E1 (Extrusion Mill #1 and cutting) and F-E2 (Extrusion Mill #2 and Cutting). These sources only emit VOC. No control device is used to control emissions from these sources.

### Applicability

- These sources are subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, “*Major Source Operating Permits*”.

### Emission Standards

Volatile Organic Compounds (VOC):

- There are no VOC emission standards for these units.

### Expected Emissions

Expected emissions from these units are based on materials balance.

Emission Point	Pollutant	Expected Emissions	
		lb/hr	TPY
F-E1	VOC	1.43	6.25
F-E2	VOC	1.43	6.25

### Periodic Monitoring and Compliance Assurance Monitoring (CAM)

- Due to low levels of expected emissions and the lack of emissions standards, there are no monitoring requirements for these units.
- Uncontrolled potential emissions from these sources do not exceed 100 TPY. Therefore, CAM is not applicable.

### Recordkeeping and Reporting Requirements

- There are no recordkeeping or reporting requirements for these units.

## **Feldspar Storage Silo**

This source consists of one feldspar storage silo. A Bin Vent (Emission Point FS) controls emissions from this source.

### Applicability

- These sources are subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, “*Major Source Operating Permits*”.
- These sources are subject to ADEM Admin. Code r. 335-3-4-.04(1), “*Control of Particulate Emissions for Process Industries - General*”.

- These sources are subject to ADEM Admin. Code r. 335-3-4-.01(1), “*Control of Particulate Emissions – Visible Emissions*”.

#### Emission Standards

Particulate Matter (PM) and Opacity:

- Emissions of particulate matter from each emission point must not exceed the limit set by the following:

$$E = 3.59P^{0.62}$$

(P < 30 tons/hr)

Where E = Emissions in pounds per hour and P = Process weight per hour in tons per hour.

(ADEM Admin. Code r. 335-3-4-.04)

- These units shall not emit particulate matter of an opacity of more than one 6-minute average greater than twenty percent (20%) in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate matter emissions greater than forty percent (40%).

(ADEM Admin. Code r. 335-3-4-.01)

#### Expected Emissions

Expected emissions from this source are based on engineering estimates.

Emission Point	Pollutant	Expected Emissions	
		lb/hr	TPY
FS	PM	0.01	0.03

#### Periodic Monitoring and Compliance Assurance Monitoring (CAM)

Particulate Matter (PM) and Opacity:

- This source shall be observed during loading at least weekly for visible emissions greater than 10%. Whenever visible emissions are observed to be greater than 10%, maintenance inspections and/or corrective actions to reduce the visible emissions are to be initiated within two (2) hours, followed by an additional observation to confirm the emissions are reduced to normal.

(ADEM Admin. Code r. 335-3-16-.05(c))

- This unit does emit criteria pollutants in excess of 100 TPY. Therefore, CAM is not applicable.

### Recordkeeping and Reporting Requirements

- Source observations, corrective actions, and all maintenance records for this unit shall be documented and available for inspection.

(ADEM Admin. Code r. 335-3-16-.05(c)(2))

- The Permittee shall submit a written report of exceedances of the stack opacity and any corrective actions taken as a result. The semi-annual reports shall be received within sixty (60) days of the end of each semi-annual reporting period.

(ADEM Admin. Code r. 335-3-16-.05(c))

### **Emergency Engine**

This facility contains a 35 kW spark ignition (SI) emergency generator manufactured in November 2003. This engine only uses natural gas for fuel.

### Applicability

- This unit is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, *“Major Source Operating Permits”*.

(ADEM Admin. Code r. 335-3-16-.03)

- This unit is subject to ADEM Admin. Code r. 335-3-4-.01(1), *“Control of Particulate Emissions – Visible Emissions”*.

(ADEM Admin. Code r. 335-3-4-.01(1))

- This unit is a stationary RICE at a major source for HAP and is subject to the applicable requirements of 40 CFR 63 Subpart ZZZZ, *“National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines”*.

(§63.6585, 40 CFR 63 Subpart ZZZZ)

- This unit was manufactured before January 1, 2009, and therefore is not subject to the applicable requirements of 40 CFR 60 Subpart JJJJ, *“Standards of Performance for Stationary Spark Ignition Internal Combustion Engines”*.

(§60.4230(a)(2)(ii), 40 CFR 60 Subpart JJJJ)

### Emissions Standards

- The facility must operate and maintain this unit according to the manufacturer’s emission related written instructions or develop its own plan to operate and maintain

this unit in a way consistent with good air pollution control practice to minimize emissions.

(§63.6625(e)(2), 40 CFR 63 Subpart ZZZZ)

- The facility must install a non-resettable hour meter if one is not already installed.

(§63.6625(f), 40 CFR 63 Subpart ZZZZ)

- There is no time limit on the use of this unit in emergency situations. The facility may operate this unit for a maximum of 100 hours per calendar year for approved maintenance checks and readiness testing. This unit is allowed to operate for up to 50 hours per calendar year in non-emergency situations, but this cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. The 50 hours for non-emergency situations is counted as part of the 100 hours of allowable use for maintenance and testing.

(§63.6640(f), 40 CFR 63 Subpart ZZZZ)

- The facility must comply with the requirements of 40 CFR 63 Subpart ZZZZ Table 2c for emergency stationary SI RICE at a major source of HAP emissions. These requirements are:
  - Change oil and filter every 500 hours of operation or annually, whichever comes first.
  - Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.
  - Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

(40 CFR 63 Subpart ZZZZ, Table 2c)

- During periods of startup, the facility must minimize the engines' time spent at idle and minimize the engines' startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

(§63.6625(h), 40 CFR 63 Subpart ZZZZ)

- In order to extend the oil change requirement for SI engines in Table 2c, the facility has the option of utilizing an oil analysis program. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits

are not exceeded, the facility is not required to change the oil. If any of the limits are exceeded, the facility must change the oil within 2 business days of receiving the results of the analysis. If the engine is not in operation when the results of the analysis are received, the facility must change the oil within 2 business days or before commencing operation, whichever is later.

(§63.6625(j), 40 CFR 63 Subpart ZZZZ)

#### Expected Emissions

Expected emissions are based on AP 42 emission factors.

Unit	Pollutant	Expected Emissions	Expected Emissions
		lb/hr	TPY
35 kW SI Emergency Generator	NO <sub>x</sub>	0.486	0.121
	CO	0.038	0.009
	VOC	0.014	0.004
	PM	0.000	0.000
	SO <sub>2</sub>	0.000	0.000
	Formaldehyde	0.006	0.002
	Total HAP	0.006	0.002

#### Periodic Monitoring and Compliance Assurance Monitoring (CAM)

- As there are no pollutant-specific emission standards for this unit, and the expected emissions are low, no periodic monitoring is deemed necessary. The monitoring required by 40 CFR 63 Subpart ZZZZ is deemed sufficient.
- This unit does not emit criteria pollutants in excess of 100 TPY. Thus, CAM is not applicable.

#### Recordkeeping and Reporting Requirements

- The facility must keep records of the maintenance conducted on this unit in order to demonstrate that its operation and maintenance followed the facility's maintenance plan. Records must be kept in a suitable form for review for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(§63.6655(e), 40 CFR 63 Subpart ZZZZ)

- The facility must keep records of the hours of operation of this unit that is recorded through the non-resettable hour meter. The facility must document how many hours are spent for emergency operation, including what classified the operation as emergency, and how many hours are spent for non-emergency operation. If the unit is

used for emergency purposes, the facility must keep records of the notification of the emergency situation and the date, start time, and end time of engine operation for these purposes. Records must be kept in a suitable form for review for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(§63.6655(f), 40 CFR 63 Subpart ZZZZ)

- If the facility chooses to utilize an oil analysis program to extend the oil change requirement of Table 2c, it must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engines. Records must be kept in a suitable form for review for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(§63.6625(i), 40 CFR 63 Subpart ZZZZ)



## APPENDIX

### 40 CFR 64 Compliance Assurance Monitoring (CAM) Requirements

#### CAM Plan for Baghouses at Emission Points EP-1 and EP-2

	Parameter No.1	Parameter No. 2
<b>I. <u>Indicator</u></b>	Visible Emissions (VE)	Pressure Differential ( $\Delta P$ )
A. Measurement Approach	1. Trained and qualified personnel shall perform a daily VE inspection. If instantaneous visible emissions in excess of ten (10%) percent opacity are observed, a visible emissions observation shall be conducted within 30 minutes in accordance with 40 CFR 60, Appendix A, Method 9. The Method 9 observation shall be conducted for a minimum of twelve (12) minutes.	1. A properly maintained and operated device shall be utilized to measure $\Delta P$ across each baghouse daily. The device shall be located at eye level and be easily accessible for inspections by Air Division and plant personnel.
<b>II. <u>Indicator Range</u></b>	1. While the unit is in operation, an excursion is defined as an average opacity during the Method 9 visible emission observation which exceeds ten (10%) percent.  2. Excursions trigger an inspection, corrective action, and a reporting requirement.  3. Corrective action must	1. While the baghouses controlling Crusher Lines No. 1 and Line #2 are operating, an excursion is defined as a $\Delta P$ of less than 3.0 inches H <sub>2</sub> O. or greater than 6.0 inches H <sub>2</sub> O.  2. Excursions trigger an inspection, corrective action, and a reporting requirement.

	be initiated within two (2) hours following an excursion.	3. When a pressure drop excursion occurs, corrective action shall be initiated within two (2) hours to identify and correct the problem.
<b>III. Performance Criteria</b>		
A. Data Representativeness	1. Inspections shall be made at the baghouse. Visual observations performed at emission points (baghouse exhaust stack EP-1 & EP-2).	1. $\Delta P$ on gauge is the measurement of the pressure differential between inlet and outlet of the baghouse. The minimum accuracy of the device is $\pm 0.5$ in. H <sub>2</sub> O.
B. Verification of Operating Status	N/A	N/A
(1) QA/QC Practices and Criteria	1. Trained and qualified personnel shall perform the visible inspection.	1. The differential pressure gauge shall be calibrated annually. Pressure taps checked weekly for plugging.
C. Monitoring Frequency	1. Visible emissions observation shall be made daily while each unit is in operation.	1. $\Delta P$ is measured daily while each unit is in operation.
D. Data Collection Procedures	1. Manual log entries based on daily VE observation. Observation will be recorded along with the date, time, emission point designation, name of the observer, expiration date of observer's certification, observed opacity, and any corrective actions taken. An inspection and cleaning of	1. Manual log entries based on gauge readings. $\Delta P$ will be recorded daily along with the date, time, and name of the observer.

	baghouse shall be done at least annually. Any required maintenance shall be recorded and maintained on site.	
E. Averaging Period	1. VE observations are instantaneous. If a Method 9 is required, then observations are a six (6) minute average.	1. $\Delta P$ readings are instantaneous.